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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/551,019

02/23/2006

Helmut Luettig

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EXAMINER

DINH, TIEN QUANG

ART UNIT

PAPER NUMBER

3644

MAIL DATE

DELIVERY MODE

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PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b> 10/551,019	<b>Applicant(s)</b> LUETTIG ET AL.	
	<b>Examiner</b> Tien Dinh	<b>Art Unit</b> 3644	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 26 November 2008.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-22 is/are pending in the application.
- 4a) Of the above claim(s) 1-9 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 10-22 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)            | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)   | Paper No(s)/Mail Date. _____                                      |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>7/18/07</u> .   | 6) <input type="checkbox"/> Other: _____                          |

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## **DETAILED ACTION**

### ***Election/Restrictions***

Claims 1-9 are withdrawn from further consideration pursuant to 37 CFR 1.142(b) as being drawn to a nonelected group, there being no allowable generic or linking claim. Election was made **without** traverse in the reply filed on 11/26/08.

### ***Claim Rejections - 35 USC § 103***

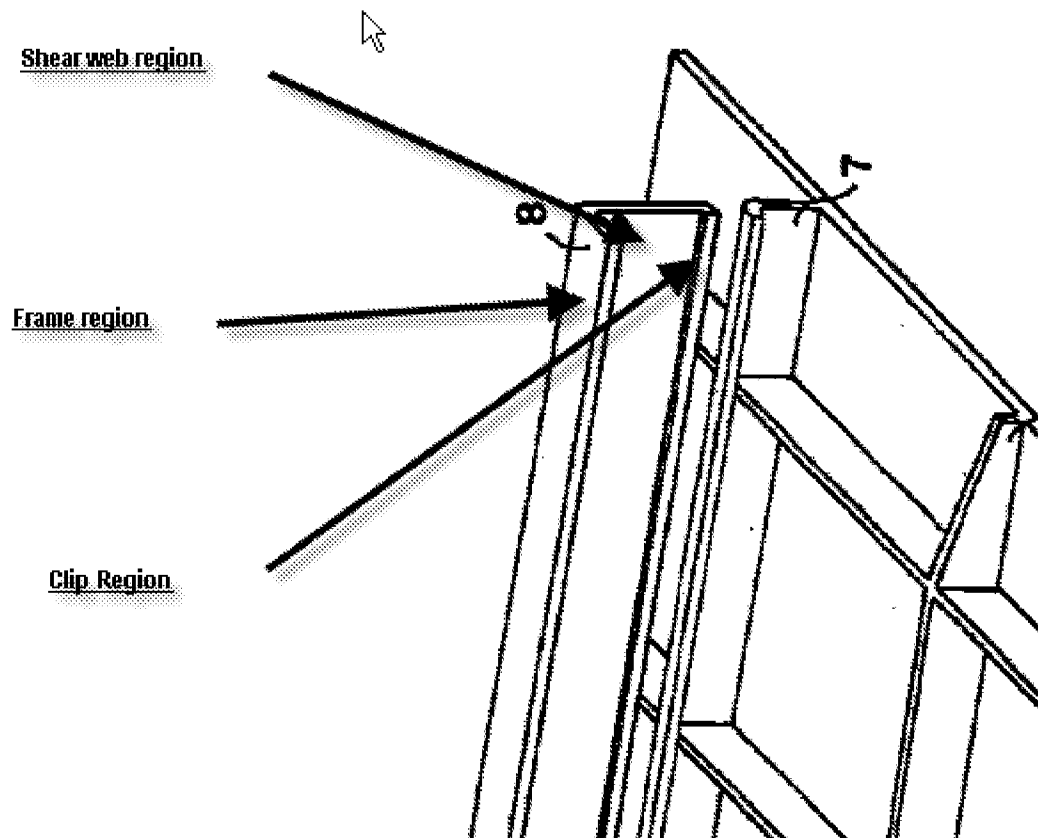
The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

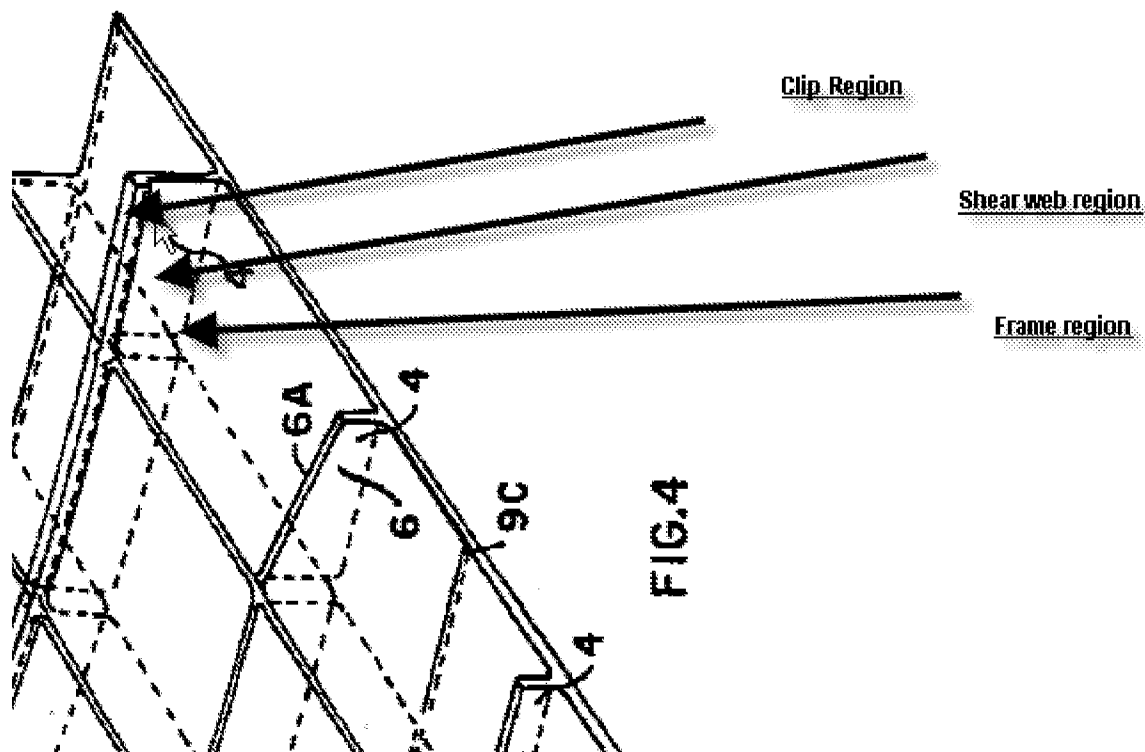
Claims 10-12 and 14-22 are rejected under 35 U.S.C. 103(a) as being unpatentable over Brenneis et al 6684593 in view of Breuer et al 6306239.

Brenneis et al teaches a method of manufacturing a frame member (of an aircraft) by manufacturing a mold by extrusion molding (see column 7, lines 55-56). He also teachings forming a clip region, a shear web region and a frame region.

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Brenneis et al is silent on the milling of the mold. However, Breuer et al teaches that a milling process is well known. See column 2, line 29.

It would have been obvious to one skilled in the art at the time the invention was made to have a milling of the mold in Brenneis et al's system as taught by Breuer et al to easily and effectively form the frame member of the aircraft.

Re claim 12, the clip, shear web and frame region can have varying dimensions between a min and max and the manufacturing of the mold such that a second dimension of the mold coincides with the maximum during the design process so that the desired aircraft can have the correctly fitted frames to have a stronger aircraft to withstand stress and carry more payloads.

Re claims 14-15, the frame region are formed as one piece.

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Re claims 18-19, the examiner takes official notice that to form cut outs and provide border reinforcement formed by milling is well known in this day and age. It would have been obvious to one skilled in the art at the time the invention was made to have used cut outs with border reinforcement formed by milling in Brenneis et al's system as taught by Breuer et al to accommodate support systems inside the aircraft and to save space.

Re claims 20 and 21, the clip region is and can be adapted for connection to the stringer or skin of the aircraft. The shear web is adapted to support the skin of the aircraft.

Claim 13 is rejected under 35 U.S.C. 103(a) as being unpatentable over Brenneis et al 6684593 as modified by Breuer et al 6306239 as applied to claim 10 above, and further in view of Golightly 3356480.

Brenneis et al 6684593 as modified by Breuer et al 6306239 discloses all claimed parts except for the bending of the mold by a stretch forming process. However, Golightly discloses that bending of the mold (by stretching) is well known. See column 5, line 19-21.

It would have been obvious to one skilled in the art at the time the invention was made to have used the process of bending the mold by stretching in Brenneis et al 6684593 as modified by Breuer et al 6306239's system as taught by Golightly to quickly and efficiently form the frame.

Claims 10, 12 and 14-15, 20-2 are rejected under 35 U.S.C. 103(a) as being unpatentable over Asher et al 5451377 in view of Breuer et al 6306239.

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Asher et al teaches manufacturing a frame having a clip region, sheer web region, and frame region using a mold 20 that is manufactured. See figures 2-4. Asher is silent on the milling of the mold. However, Breuer et al teaches that the milling process is well known. See column 2, line 29.

It would have been obvious to one skilled in the art at the time the invention was made to have a milling of the mold in Asher et al's system as taught by Breuer et al to easily and effectively form the frame member of the aircraft.

Re claim 12, the clip, shear web and frame region can have varying dimensions between a min and max and the manufacturing of the mold such that a second dimension of the mold coincides with the maximum during the design process so that the desired aircraft can have the correctly fitted frames to have a stronger aircraft to withstand stress and carry more payloads.

Please note that the frames of Asher et al are integral or one piece.

Re claims 20-22, the clip and shear web region can be adapted to support or connect to the skin or stringer of the aircraft.

### ***Conclusion***

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Gillhaus, Matusi, and Watter disclose manufacturing.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Tien Dinh whose telephone number is 571-272-6899. The examiner can normally be reached on 12-8.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Michael Mansen can be reached on 571-272-6608. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Tien Dinh/  
Primary Examiner, Art Unit 3644